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ABSTRACT

This guide is intended to assist persons developing a keyboarding curriculum for use with students in grades 1 through 8. The relevance of teaching keyboarding at the elementary level is discussed. Steps in separate plans for teaching keyboarding in grades K-2, 3-6, and 7-8 are outlined. A checklist for planning a keyboarding program and a list of hints, helps, and suggestions are included. A list of resource persons, information services, and software preview centers and a sample bibliography are provided. Concluding the guide is a keyboarding position paper that covers course objectives, placement and course length, certification and proficiency requirements, equipment needs, evaluation criteria, and topics that should be included in an elementary-level keyboarding curriculum. (MN)

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What about software?

Do I include the number keys?

How much time do I need?

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Why should I teach Keyboarding?

Who can I contact for information?

What equipment is available?

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TO THE EDUCATIONAL RESOURCES
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Does research support Keyboarding?

How do I plan a Keyboarding course?

What furniture do I need?

What textbooks are available?

GUIDELINES FOR TEACHING KEYBOARDING

When should Keyboarding be taught?

How do I grade my students?

How will keyboarding affect the curriculum?

What is Keyboarding?

Should I take a methods course?

Who should teach Keyboarding?

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Portland, Me. 04027

What should be included in a Keyboarding course?

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This guide was developed by a Bureau of Adult & Secondary Vocational
Education Task Force on Keyboarding in 1987. For further information, contact:

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November 1, 1987

INTRODUCTION

Because of the increased use of computers at all levels of education in our schools today, developing an accurate and effective keyboarding skill has become an important issue.

Business education teachers, long familiar with the methods of teaching typing/keyboarding, have realized the potential dilemma elementary schools are beginning to face. In March of 1984, a State Task Keyboarding Committee was formed to study the future of keyboarding. In October of 1984, a position paper giving directions to educators in Maine concerned with the issue of keyboarding was developed. The concept of the position paper was accepted by the State Board of Education and disseminated to all superintendents, secondary principals, and business department chairpersons. The Task Force remains an ongoing committee with a continued commitment to monitoring the direction of this important phase in education in Maine.

Several activities promoting keyboarding at the elementary level sponsored by the Task Force include:

1. Workshops offered to train business education teachers to assist elementary teachers in their school systems in methods of incorporating the basic concepts of keyboarding as a primary skill for computer usage.
2. Workshops have been presented to train elementary teachers to keyboard as well as how to teach keyboarding. The opportunity to earn credits for this endeavor has also been offered.
3. Local "Question and Answer" sessions with area elementary teachers have been held to begin to understand and document what some teachers have initiated on their own in the area of keyboarding.

WHAT IS KEYBOARDING AND WHY TEACH IT

Keyboarding

Keyboarding may be defined as developing the ability to perform touch inputting skills by using alphabetic, numeric, symbol, and function keys on a computer and/or a typewriter keyboard. The main focus is input.

Typewriting takes keyboarding a step further by developing speed and accuracy at the keyboard as well as applying those skills in a production mode. The main focus is output.

Keyboarding Relevancy at the Elementary School Level (K-8)

The reasons for incorporating Keyboarding at the elementary level (K-8) are many. They include the potential for:

- Time Savings
- Efficient Computer Use
- Proper Technique Development
- Increased Interest in Writing Skills
- Improved Computing Skills

More and more computers are being found at all levels of education today (kindergarten to adult education) and are being used as tools of learning--in reading, in writing, in spelling, and in computing activities. Computers are and will continue to remain important in education.

It has been estimated that by the 1990s there will be more than ten million computers in public schools. However, it has been said that one very important function in learning to use a computer efficiently has not been emphasized enough--keyboarding.

With education moving back to the basics, the use of the computer has become synonymous with the fourth basic intellectual skill. Keyboarding today is as basic as reading, writing, and arithmetic. Students need to be trained properly at the onset of keyboard use to avoid the formation of incorrect keyboarding habits. The teaching of keyboarding is too important to leave to chance.

GENERAL CURRICULUM

School systems may elect to begin formal instruction at any grade level, K-8. However, such instruction should begin prior to students' using computers for inputting whole words or extensive computer usage. The grade level at which formal keyboarding instruction is introduced determines which of the following plans you will use. The steps in each plan are sequential. The curriculum within these plans are flexible to meet the needs of each school system.

Listed on the following pages are three implementation plans which identify the grade levels at which keyboarding instruction may be introduced.

PLAN ONE ***** GRADES K - 8

Grades K-2

- Step 1. Develop an awareness of the physical aspects of the keyboard; namely, location of alphabetic, numeric, and special purpose keys to include: enter, break, return, escape, arrows, space bar, capitals.

Correct use of the left and right hands should be introduced.
- Step 2. Teach the location and identification of alphabetic, numeric, special purpose, and function keys.
- Step 3. Train students to find and use all keys with correct hands.
- Step 4. Introduce the touch method for the home row and vowel keys. (Touch method: striking of the correct keys without looking at the fingers.)

Grades 3-6

- Step 1. Introduce remaining alphabetic, numeric, punctuation, symbol, and function keys using the touch method.
- Step 2. Utilize drills to increase efficiency, speed, and accuracy.
- Step 3. Introduce inputting of documents to develop editing and proofreading skills.
- Step 4. Develop interaction with software (optional) after keys have been introduced by instructor.

Grades 7-8

Apply skills with continuous reinforcement for grade level.

PLAN TWO ***** GRADES 3 - 8

- Grades 3-6
- Step 1. Introduce touch method for alphabetic, numeric, punctuation, symbol, special purpose, and function keys.
 - Step 2. Utilize drills to increase efficiency, speed, and accuracy.
 - Step 3. Introduce inputting of documents to develop editing and proofreading skills.
 - Step 4. Develop interaction with software (optional).
- Grades 7-8
- Apply skills with continuous reinforcement for grade level.

PLAN THREE ***** GRADES 7 - 8

- Grades 7-8
- Step 1. Introduce touch method for alphabetic, numeric, punctuation, symbol, special purpose, and function keys.
 - Step 2. Utilize drills to increase efficiency, speed, and accuracy.
 - Step 3. Introduce inputting of documents to develop editing and proofreading skills.

REINFORCEMENT OF CORRECT KEYBOARDING TECHNIQUES SHOULD BE CONTINUED AT ALL LEVELS FOLLOWING INSTRUCTION.

*** For more information, contact you local Business Education Department or the resources listed on page 8.

CHECKLIST FOR PLANNING A KEYBOARDING PROGRAM

PLANNING ACTIVITIES

- ☐ General meeting of interested people to develop ideas has been held.
 - ☐ Administrators
 - ☐ Business Teachers
 - ☐ Community Members
 - ☐ Computer Coordinators
 - ☐ Elementary Teachers
 - ☐ School Board
- ☐ A proposal has been developed and approved.
 - ☐ It has been established that the need exists.
 - ☐ A keyboarding curriculum has been developed.
 - ☐ Class time has been allotted.
 - ☐ Placement within the existing curriculum has been determined.
 - ☐ Language Arts
 - ☐ Social Studies
 - ☐ Computer Literacy
 - ☐ Math
 - ☐ Other
- ☐ Equipment has been chosen.
 - ☐ Cost has been included.
 - ☐ Compatible software has been chosen (optional).
 - ☐ Number of keyboards needed are available.
- ☐ Facility has been chosen.
 - ☐ Facility has enough electrical outlets.
 - ☐ Facility has tables/chairs of appropriate size available.
 - ☐ Arrangement of furniture/computers has been determined conducive to keyboarding training.
 - ☐ Size of the facility has been determined large enough for the number of students.
- ☐ A source for funding has been made available.
(check one)
 - ☐ Parent/teacher association(s)
 - ☐ Private grants
 - ☐ Businesses/computer manufacturers
 - ☐ Fundraising projects

_____ Implement program.

_____ Instructors have been assigned. (check one)

_____ Business/Elementary team teaching is available.

_____ Elementary teacher is available.

_____ Business teacher is available.

_____ Instructor training has been completed. (check one)

_____ College course has been completed.

_____ Summer training session has been completed.

_____ In-service training has been completed.

_____ Purchase equipment.

_____ Necessary facility improvements have been completed.

HINTS, HELPS, AND SUGGESTIONS

1. Should I take a Keyboarding methods course?

The instructor must become familiar with the methods of teaching Keyboarding.

2. What should be included in a Keyboarding course?

Keyboarding instruction must include:

- posture--position of body and hands
- correct keystroking
- spacing technique
- shifting technique
- return (enter) technique
- tabulating technique
- control key technique

3. What furniture do I need?

Appropriate size desks and chairs is very important.

4. When should Keyboarding be taught?

Keyboarding skill need not be taught until the skill will be utilized in other disciplines.

5. How will Keyboarding affect the curriculum?

Coordination is needed between different subject areas in order to better utilize the student's time on the keyboard.

6. How do I grade my students?

Grade on technique only--not the product.

7. HINTS:

Drill work is essential and material should be short in nature (10-15 seconds).

Students should keep their eyes on their copy and not the keyboard or screen.

Divide the Keyboard at the correct position with a piece of yarn or string to illustrate right and left hand usage for younger students.

Warm-up exercises are very important at the beginning of each class period.

Always review previously learned keys before teaching new ones.

Keyboard wall charts are useful for demonstration purposes.

Materials used should be geared to the appropriate grade level.

RESOURCES

People

By contacting the following people, you will be in touch with those who have the most current, up-to-date information on the subject of Keyboarding in the state of Maine. These individuals can supply you with information on:

- ** Elementary staff currently teaching Keyboarding
- ** Business Educators currently teaching Keyboarding
- ** Reports, articles, and publications dealing with Keyboarding
- ** Available Keyboarding Software and Textbooks

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Ms. Doris Ray, Director
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(207) 783-0833

Mr. Dennis Kunces
Computer Consultant
Dept. of Educational & Cultural Services
State House Station #23
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(207) 289-5815

Informational Services

Information Exchange
Dept. of Educational & Cultural Services
State House Station #64
Augusta, ME 04333
1-800-322-8899

Center for Special Education Technology
1920 Association Drive
Reston, VA 22091
1-800-345-8324

Vocational Curriculum Resource Center
Kennebec Valley Vocational Technical Institute
P.O. Box 29
Fairfield, ME 04937
(207) 453-9762

Software Preview Centers

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State of Maine Preview Center
Mr. Dennis Kunces, Director
Dept. of Educ. & Cult. Services
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(207) 289-5815

University of Maine at Farmington Preview Center
Dr. Ralph Granger, Director
Learning Center
112 Main Street
Farmington, ME 04938
(207) 778-3501 Ext. 271

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(Articles are available as far back as the 1930s.)

KEYBOARDING POSITION PAPER

Introduction

Because of the increased use of computers at all levels of education in our schools today, developing an accurate and effective keyboarding skill has become an important issue.

In March of 1984 a State Task Committee was formed to study the future of keyboarding. The major goal of the committee was to draw up a position paper which would be disseminated to educators in Maine who would be in a viable position to deal with the issue. The State Task Force Committee on Keyboarding remains an ongoing committee with a continued commitment to monitoring the direction of this important phase of education in Maine.

Purpose

The purpose of this position paper is to give direction to educators in Maine concerned with the issue of Keyboarding.

Definitions

Keyboarding may be defined as developing the ability to perform alphanumeric touch inputting skills that can be used on electronic keyboards.

Typewriting may be defined as developing the ability to apply alphanumeric touch inputting skills to be used in communicating.

Placement/Length of Course

Formal instruction in keyboarding as an adaptive skill should be coordinated, implemented, and taught by certified keyboarding educators. This instruction should begin at any level appropriate to the elementary/junior high school classroom where inputting alphanumeric information on computers is required.

The length of the course should be flexible enough to meet the needs of individual schools. Ideally, the length of the course should be a full semester with the class meeting daily for 30 minute class periods with a minimum of 20-30 classroom hours.

Suggested Goals for Keyboarding Course

The student will:

1. Develop an enhanced knowledge of keyboards.
2. Develop and demonstrate current touch-keyboarding techniques.
3. Develop a touch-keyboarding skill that can be used to maximize learning in any curriculum area utilizing keyboards.

** Certification

All K-12 teachers can apply for an endorsement to their teaching certificate providing they meet the required proficiencies.

Proficiencies Required to Receive Keyboarding Endorsement

Instruction for prospective keyboarding teachers should include:

- Touch Typewriting Skills (minimum requirement 30 words per minute)
- Keyboarding Methods (including elementary and beyond)
- Knowledge of the Learner
- Computer Literacy

****Endorsement not available at the State Level at this time.**

Suggested Curriculum Course Outline for Keyboarding*

MICROCOMPUTER

- I. System Configuration
 - A. Keyboard Unit
 - B. Display Monitor
 - C. Disk Drive
 - D. Loading Programs
 - E. Terminology

TYPEWRITER

- I. Typewriter Parts
 - A. Cylinder Knobs
 - B. Paper Bail
 - C. Return Key
 - D. Paper Insertion/Release
 - E. Ratchet Release
 - F. Line Space Regulator
 - G. Variable Line Spacer
 - H. Terminology

II. Keyboard Manipulation

- A. Home Row
- B. Alpha Keys
- C. Numeric Keys
- D. Technique Reinforcement

III. Ten-Key Numeric Pad

IV. Proofreading

V. Skill Building Exercise

Equipment

Each student must have an appropriate work station which would include proper-sized desk/chair and a keyboard. Preferably, an electric or an electronic keyboard would be available for student use.

Evaluation

The primary goal of students enrolled in a keyboarding course is to gain basic touch-keyboarding skills. No grade should be issued, but a Certificate of Completion noting the units covered should be awarded.

*Granting of high school credits for a keyboarding course at Grade 9 should be handled individually by the high school involved. If keyboarding is not offered prior to high school, those needs can then be met through the regular high school's business education program.